

## **ORIGINAL**

DOCKET FILE COPY ORIGINAL Kathleen Q. Abernathy Vice President

Federal Regulatory

**AirTouch Communications** 

1818 N Street N.W.

Suite 800

Washington, DC 20036

Telephone: 202 293-4960 Facsimile: 202 293-4970

December 6, 1994

**EX PARTE** 

EX PARTE OR LATE FILED

RECEIVED

Mr. William F. Caton **Acting Secretary Federal Communications Commission** 1919 M Street, NW, Room 222 Washington, DC 20554

DEC - 6 1994

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF SECRETARY

RE: PR Docket 93-61, Automatic Vehicle Monitoring Systems

Dear Mr. Caton:

On behalf of AirTouch Teletrac, we submit the attached material. Please associate this material with the above-referenced proceeding.

Two copies of this notice were submitted to the Secretary of the FCC in accordance with Section 1.1206(a)(1) of the Commission's Rules.

Please stamp and return the provided copy to confirm your receipt. Please contact me at 202-293-4960 should you have any questions or require additional information concerning this matter.

Sincerely

Kathleen Q. Abernathy

3. aleenal

Attachment

No. of Copies rec'd 0+1 List A B C D E



The new name for PacTel

December 6, 1994

Chairman Reed E. Hundt Federal Communications Commission Room 814 1919 M Street, N.W. Washington, D.C. 20554 Kathleen Q. Abernathy Vice President Federal Regulatory

AirTouch Communications 1818 N Street N.W. Suite 800 Washington, DC 20036

Telephone: 202 293-4960 Facsimile: 202 293-4970

### RECEIVED

DEC - 6 1994

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF SECRETARY

#### Dear Chairman Hundt:

Attached is a copy of an Internet message that was widely distributed by the Part 15 Wireless Opportunities Coalition. The message states that there is an "immediate threat to producers, consumers and users of these products and services posed by rules about to be implemented by the Federal Communications Commission."

Although the Internet message asks interested parties to "slow down the process at the FCC in order to allow the issue to be more fully aired and discussed," the message fails to mention that the Notice of Proposed Rulemaking in this proceeding was issued in April 1993 and that numerous rounds of comments and Ex Parte contacts have ensured the development of a record that clearly reflects the concerns and positions of all parties. Therefore, AirTouch Teletrac urges the Commission not to allow this last minute lobbying blitz to delay an FCC decision.

Thank you for your assistance in this very volatile proceeding.

ben & alexunt

Sincerely,

Kathleen Q. Abernathy

Attachment

cc: Ruth Milkman

Author: GARY RUSSELL at PTT-GG1 Date: 12/2/94 13:43

Priority: Normal TO: MARIO PROIETTI

TO: BILL GOSHAY at PTT-SFT

CC: CRAIG STEWART at PTT-SFT

CC: STACEY BLACK

Subject: More Part 15 Ruckus

----- Message Contents ------

From the internet (wireless newsgroup) ...

comp.std.wireless (moderated) #1155 (2 more)

(1)

From: rolfb@watson.policy.net (Rolf Brauchler)

[1] ALERT: FCC Wirless Rules

Followup-To: comp.std.wireless

Date: Fri Dec 02 09:02:21 PST 1994

Organization: Capital Area Internet Service info@cais.com 703-448-4470

Lines: 104

Distribution: world

Originator: std-mod@cssmp.corp.mot.com

Subject: ALERT: FCC Wirless Rules

#### WIRELESS OPPORTUNITIES COALITION

URGENT: IMMEDIATE ACTION REQUESTED, PLEASE POST WIDELY

The Wireless Opportunities Coalition was just formed to protect and promote the opportunities presented by unlicensed wireless telecommunications products and services. Among the products and services you may be familiar with that use this technology are local and wide area wireless computer communications networks, digital cordless telephones, remote meter reading, security and alarm devices, wireless PBX systems, and wireless headphones, speakers and video.

What has prompted us to organize and, with this posting, ask for your help, is an immediate threat to producers, consumers and users of these products and services posed by rules about to be implemented by the Federal Communications Commission (FCC).

A complete description of the issues is available at our internet site. You can gopher to <wireless.policy.net> or WWW to <http://wireless.policy.net/wireless/wireless.html>.

The Coalition is currently made up of companies that produce products that qualify under "Part 15" of the FCC's rules to be marketed without a license but which nonetheless use part of the public airwaves in the 902-928

Mhz frequency band. Those involved in producing Part 15 products are typically highly innovative, entreprensurial companies. While some larger companies produce Part 15 products, much of the excitement in the industry is from the innovations of various start-up providers of new educational and internet related services.

The FCC is about to adopt rules that will authorize an expanded use of the spectrum shared by the Part 15 products and services by those offering broadband "automatic vehicle monitoring" (AVM) services. This expansion, backed primarily by AirTouch, Inc., will likely result in technical conflicts that make the development and growth of Part 15 products and services very difficult.

We are seeking an FCC rule that requires all commercial users sharing the band to use compatible technologies that would permit the largest number of uses of that spectrum. However, AirTouch and other providers of broadband AVM claim a preference in the spectrum and want to expand their services in a way that would raise serious problems for Part 15 users.

At this point, we are asking your help to simply slow down the process

at the FCC in order to allow the issue to be more fully aired and discussed among those in the public who might be most affected. In our view, that includes users of the internet who might be able to get cheaper and easier access through wireless technologies, teachers and educators whose classrooms could more easily be wired and connected with this technology, and consumers who stand to benefit from new, more powerful wireless products.

You can help by contacting the FCC to let them know that you share a concern about the development of this technology. Here is how:

1. Contact the FCC with a message urging them not to act on the Part 15/AVM rulemaking without further opportunity for the public to comment and participate in the proceeding. Note that you were unaware of the issue until just recently and believe that there are public interest issues that need to be more fully aired before a final decision is made.

A direct message to the FCC Chairman with a copy to each Commissioner and two hard copies -- as per the FCC's rules -- to the Secretary IMMEDIATELY is what is most urgently needed.

The Chairman and Commissioners e-mail addresses are as follows:

Chairman Reed Hundt rhundt@fcc.gov
Commissioner James Quello gclark@fcc.gov
Commissioner Andrew Barrett bettyf@fcc.gov
Commissioner Susan Ness sness@fcc.gov
Commissioner Rachelle Chong rchong@fcc.gov

The Snail Mail address for the Chairman and Commissioners is Federal Communications Commission, 1919 M Street, Washington, D.C. 20554.

Two hard copies to the Secretary should be mailed to William Caton, Secretary, Federal Communications Commission, 1919 M Street, NW, Washington, D.C. 20554.

A sample letter is provided at our gopher and WWW sites. If you have WWW access and you would like to use the sample letter, we can, with your authorization, have it e-mailed and FAXED for you.

2. After you have an opportunity to review the materials available at our internet site, please consider lending your support to our effort by joining the Coalition. A copy of our Statement of Principles and a membership form can be found at our Internet site. We will put you on the mailing list so you are kept up to date on events. We will also add your name to our materials as they are distributed. Finally, you will be asked periodically to participate in efforts to raise our voices to gain the attention of the decision makers and bureaucrats in Washington.

Sincerely,

rolfb@wireless.policy.net Rolf Brauchler Wireless Opportunities Coalition 1875 Connecticut Avenue, NW Suite 645 Washington, D.C. 20009 (202) 328-6088 End of article 1155 (of 1157) -- what next? [npq] gomp.std.wireless (moderated) #1155 (1 mors) (1)--[1] From: mikesin@microsoft.com [1] Looking for ETC, BC2, MNP5 & 10 specs. Followup-To: comp.std.wireless Date: Fri Dec 02 10:58:37 PST 1994 Organization: Microsoft Corporation Lines: 6 Distribution: world Originator: std-mod@cssmp.corp.mot.com

Pointers would be appreciated.

# Sample Letter to the FCC on .Part 15 Wireless Technology Issues

You can help by contacting the FCC to let them know that you share a concern about the development of this technology. Here is how:

Contact the FCC with a message urging them not to act on the Part 15/AVM rulemaking without further opportunity for the public to comment and participate in the proceeding. Note that you were unaware of the issue until just recently and believe that there are public interest issues that need to be more fully aired before a final decision is made.

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Commissioner Susan Ness sness@fcc.gov
Commissioner Rachelle Chong rchong@fcc.gov

The Snail Mail address for the Chairman and Commissioners is Federal Communications Commission, 1919 M Street, Washington, D.C. 20554.

Two hard copies to the Secretary should be mailed to William Caton, Secretary, Federal Communications Commission, 1919 M Street, NW, Washington, D.C. 20554.

A sample letter is provided below.

Ex Parte

The Honorable Reed Hundt Chairman Federal Communications Commission 1919 M Street, NW Washington, D.C. 20554

RE: PR Docket No. 93-61

#### Dear Chairman Hundt:

It has just come to my attention that the Commission is considering proposed rules for broadband Automatic Vehicle Monitoring (AVM) in the 902-928 Mhz frequency band that will significantly limit the development and use of "Part 15" wireless products and services operating in that same band.

Part 15 products and services include such things local and wide area wireless computer communications networks, digital cordless telephones, remote meter reading, security and alarm devices, wireless PBX systems, and wireless headphones, speakers and video. These products and services have a number of important public interest applications for education, health care, internet-related services, energy conservation, public safety and personal communications.

I am writing to ask you to postpone making a final decision in this matter and open up the proceeding for further comments from those who might be most affected. This includes users of the internet, teachers and librarians, consumers, public interest advocates and others.

Please do not act to limit the development and use of Part 15 products and services without first giving full consideration and weight to these and other public interest issues.

Sincerely,

cc: Commissioner James Quello
Commissioner Andrew Barrett
Commissioner Susan Ness
Commissioner Rachelle Chong
Secretary William Caton (2 copies)

#### THE LMS - PART 15 PROCEEDING

#### I. Background.

- 1. This Proceeding was initiated by a Notice of Proposed Rule Making ("NPRM") issued by the Federal Communications Commission ("FCC") in response to a Petition from North American Teletrac and Location Technologies, Inc., which is now known as AirTouch Teletrac ("Teletrac").
- 2. Teletrac is currently an FCC licensee. It operates an Automatic Vehicle Monitoring Service ("AVM") which locates vehicles. While the FCC created AVM in 1974, it did so with some reservations about the technology. Therefore, the FCC decided not to adopt permanent rules for AVM, and AVM has been operating with interim rules ever since.
- 3. Teletrac's petition asked the FCC to expand the FCC's AVM Service to permit AVM licensees to locate people and other objects and to permit expanded voice service. Teletrac also wants the Commission to adopt permanent rules for this service and to call the expanded service the Location and Monitoring Service ("LMS"). Teletrac says it needs permanent rules if it is to be able to attract investors and build systems. The NPRM contains all these proposals. There are three other major proponents of LMS: MobileVision, Southwestern Bell and Pinpoint Communications.
- 4. The FCC requires AVM licensees to operate in the part of the radio spectrum between 902 MHz and 928 MHz. This is known as a "frequency band" or just "band." This band is also used for United States Navy radars and other government operations, for industrial, scientific and medical devices, by amateurs (HAMS), and by "unlicensed" low power services known as Part 15 services (so called because Part 15 of the FCC's Rules requires certification of radio devices but does not require licenses to operate). Metricom's radios are Part 15 devices. Part 15 devices provide a variety of services including: new digital cordless telephones, local and wide area wireless data transmission, protection of life and property, energy efficiency and conservation programs, automatic utility meter reading, inventory control, bar code readers, wireless PBXS, and numerous consumer devices such as wireless headphones, speakers and remote controls. Millions of Part 15 devices are now in the hands of businesses and consumers, and millions more will be in the very near future due to the advent of new digital, spread spectrum cordless telephones which offer improved quality and range.
- 5. All these users of this band must share the frequency and, when there are uses which conflict with each other because one user interferes with

the signal of another user, certain rules come into play which govern which user has priority. These rules thus create a "hierarchy" and dictate which user must stop transmissions if that user is causing harmful interference to another user with a higher priority.

- 6. In the hierarchy of users, Part 15 devices are at the bottom. Part 15 devices may not cause interference to other users of the band and must accept interference from other users of the band.
- 7. The hierarchy of users in the band is generally not a problem for Part 15 devices because the robustness, power, and technology employed by Part 15 devices is such that it does not generally cause other users harmful interference, nor do other users cause harmful interference to Part 15 devices.
- 8. Unfortunately, Teletrac's technology is old and it is very fragile.
  Teletrac's technology will experience harmful interference from Part 15 devices, even though they are the least likely devices to cause harmful interference. Because Teletrac has a higher priority in the band, it could demand that operation of the offending Part 15 device be terminated.
- 9. In addition, Pinpoint Communications, another company proposing to provide LMS, proposes to use a technology different than Teletrac's which will cause interference to Part 15 devices because of its extensive use of spectrum and very high power.

#### II. Arguments.

- 1. Teletrac has told the FCC that its technology will not be bothered by interference from Part 15 devices. This is simply not true. (The overwhelming weight of the record thus far complied in the LMS proceeding demonstrates that Part 15 devices will cause harmful interference to Teletrac's operations.) Teletrac is taking this position before the FCC because it is afraid that if the FCC believes that Part 15 devices will cause LMS interference, the FCC will not create LMS. The FCC would be reluctant to create LMS because it would not want to create a new service which would not work due to the interference it would receive from Part 15 devices.
- 2. The Part 15 Community has told the FCC that if Teletrac is telling the FCC the truth about the interference issue, Teletrac should not object if the FCC makes LMS equal in the hierarchy of users to Part 15 devices. If the FCC removes the LMS priority, Teletrac would be forced to tolerate interference from Part 15 devices.

- 9. Part 15 devices are being used in applications which promote the development of the National Information Infrastructure ("NII") and are, therefore, in accord with national policy regarding the NII. LMS is not in accord with the national policy regarding the NII and the public interest requires that Part 15 devices be favored over LMS.
- 10. Teletrac is a failing business which has lost money every year of its existence. The American public is not interested in Teletrac's technology. It has failed in the marketplace. Although Teletrac has hundreds of licenses in 36 states and the District of Columbia, it has built only six systems and has fewer than 6,000 subscribers. If the FCC gives Teletrac what it wants, Teletrac will be the beneficiary of a substantial amount of spectrum for which it will not have had to pay the government. Therefore, it will be much easier to sell.
- 11. There are other technologies that do what LMS does but they do it in other parts of the radio spectrum, and they do it much more effectively and economically than LMS does it. Therefore, the American consumer will not be deprived of LMS-type service if the FCC abandons its LMS rulemaking. The FCC does not need to create another such service particularly if that service will not work (due to interference), will disrupt or destroy the Part 15 industry, and will upset consumers and annoy members of Congress.
- 12. The government is vacating radio spectrum in various bands. These bands will be regulated by the FCC as the government gives them up. The FCC could create LMS in one of these bands and could thereby avoid disrupting the 902-928 MHz band.
- 13. Teletrac and the other LMS proponents have finally agreed to meet with the Part 15 Community in an effort to find a technical solution which might allow the systems to coexist. Two meetings have been held and there appears to be some progress toward attempting to find a way that the services might be able to coexist. The FCC should not take any action until the parties involved have an opportunity to explore a suggested technical solution.

#### III. Conclusion.

It is patently unfair for the FCC to jeopardize the promise and economic viability of the Part 15 industry so soon after it encouraged significant investments to be made by manufacturers and consumers alike, for the sole reason of giving one of the world's largest companies a monopoly and a spectrum windfall of enormous value. The Commission should

- 3. The Part 15 Community has also told the FCC that if the FCC creates LMS and does not make LMS equal with Part 15 devices, Teletrac will be constantly petitioning the FCC to locate and shut down interfering Part 15 devices. The Part 15 Community has reminded the FCC that it does not have the resources to locate and shut down all these interfering Part 15 devices because there are over 2 million of them, operating at unspecified locations.
- 4. The Part 15 Community has also told the FCC that if it creates LMS and does not make LMS equal with Part 15 devices, and if the FCC then begins to locate and tell consumers they cannot use their Part 15 devices, these consumers will begin to complain to their elected officials. Due to the large number of Part 15 devices currently in the hands of consumers, Congressmen will be deluged with complaints about FCC actions and the FCC will spend massive resources responding to Congressional inquiries about its actions in shutting down large numbers of Part 15 devices.
- 5. Teletrac has argued that due to the hierarchy of users, the Part 15 Community has no rights to complain about a new service being put into the band, even if the new service cannot coexist with Part 15 devices. The Part 15 Community has responded that it has designed its devices so as not to cause interference to users of the band who were in the band when the Part 15 device entered the band. It is manifestly unfair to require these Part 15 devices not to interfere with a new user never contemplated when Part 15 devices began operating in the band.
- 6. The FCC strongly encouraged the development and deployment of Part 15 devices in the band and the Part 15 Community responded with significant applications in the public interest. The result is that the FCC has created a substantial industry in this band which employs a great number of people, which has continuing substantial investment and which is uniquely American. These applications will cease and an industry, together with the jobs and investment it creates, will be destroyed, if the FCC creates LMS as currently proposed.
- 7. The band is not vacant. It is extremely crowded with users. The FCC should not place a service in the band which is highly susceptible to interference by other users that are currently in the band.
- 8. Teletrac's argument that it needs permanent AVM rules in order to attract capital for its operations fails when one considers that PacTel Corporation raised a record-breaking \$1.38 billion in the capital markets for its wireless subsidiary of which Teletrac is a part.

abandon its rulemaking proceeding and not create LMS. If the Commission insists on creating LMS, it should do so only if it makes LMS equal to Part 15 in the hierarchy of users, or if the FCC places LMS in some other band.

#### THE CLEAR CHOICE BETWEEN AVM/LMS AND PART 15 DEVICES

...is the choice between an inefficient and unnecessary technology (wideband AVM/LMS) and an efficient and low-cost technology ideally suited to this spectrum.

Other technologies, such as Global Positioning Satellites and wideband wide area networks, and the use of other frequencies, can perform vehicle location functions less expensively and more effectively than wideband AVM/LMS -- an old, 20-year-old technology that cannot compete with emerging, next-generation technologies.

...is the choice between supporting and ignoring the clear decision of the economic marketplace.

Millions of consumers and businesses nationwide have already chosen license-free wireless devices such as cordless telephones, utility meter readers, retail security scanners, and home security systems, and in the near future millions more Americans will have access to them. So far the largest wideband AVM/LMS system has only 6,000 customers in six cities. While the FCC has previously encouraged the marketplace to render a verdict here, it would now be saying that, although the market has spoken, it will not only be ignored, but repudiated.

...is the choice between creating and destroying the next generation of low-cost, consumer-friendly wireless devices.

It is estimated that more than \$2 billion has been invested in the research and development of next-generation license-free wireless devices. These cordless phones, portable computers, home security systems, and other technological marvels will make life easier and more convenient for all Americans.

...is the choice between expanding and limiting the access of schools, libraries, and museums to data communications devices.

At a time of scarce public resources, most community institutions cannot afford the enormous cost of traditional hard-wiring for their facilities. It is estimated that it would cost about \$250,000 to wire each of the nation's 118,000 elementary and secondary schools alone. License-free wireless devices are a low-cost way for these institutions to gain access to the expanding National Information Infrastructure.

...is the choice between better management of our energy resources and continuing to operate under the status quo.

Dozens of major utilities use license-free wireless devices to assist in wireless meter reading and intelligent power distribution systems. These resource management tools are paying off in better operating efficiencies for utilities and lower utility rates for consumers.

... is the choice between helping and hurting our environment.

The use of license-free wireless devices will allow utilities to reduce energy consumption (including avoiding the construction of new power plants) and is helping create traffic-control systems that can cut down on pollution.

...is the choice between assisting and neglecting our citizens with disabilities.

License-free wireless devices like portable phones and remote controls can help enhance the quality of life for tens of thousands of Americans with disabilities.

#### THE CHOICE IS CLEAR

The decision by the FCC should reflect the choice already made by the marketplace and be for emerging technology, consumers, the environment, education, and jobs. The wrong choice will be for an outdated technology and a setback for the technology already chosen by the marketplace.

On a technical level, the FCC should:

- \* Offer a presumption of non-interference between Part 15 devices and AVM/LMS reverse links;
- \* Keep all multilateration systems, their forward links, etc. out of 910-920 MHz;
- \* Allow no wideband LMS forward links;
- \* Require all narrowband LMS forward links to be at the top of the band, i.e. 927.5-928 MHz; and

\* Give reasonable power and duty cycles specifications for LMS reverse links.